Proposed Regulation for Criteria Air Pollutant and Toxic Air Contaminant Emissions Reporting

CALIFORNIA AIR RESOURCES BOARD

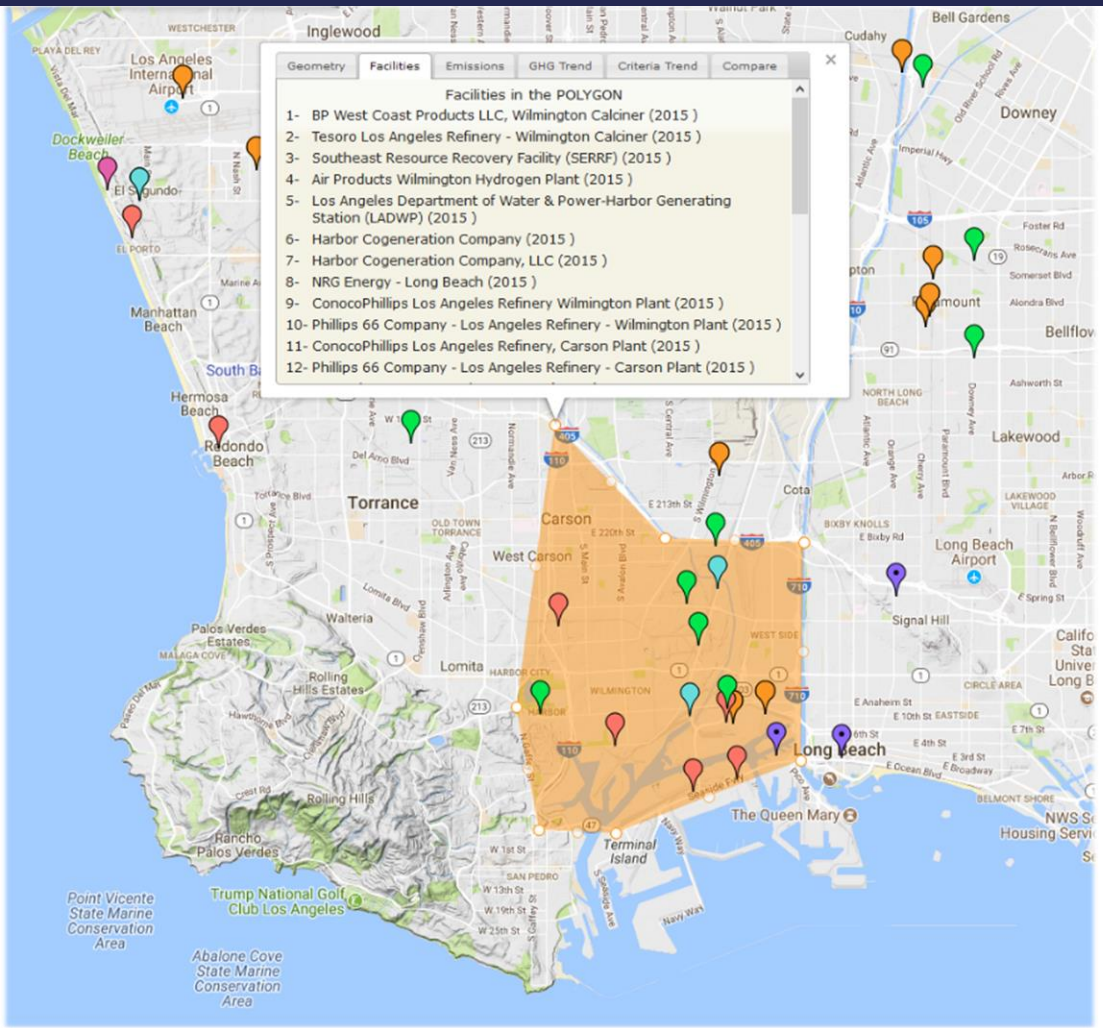
Emissions Data Paradigm Shift

- Comprehensive stationary and mobile source emissions inventory resolved to community scale
- Greater public accessibility and transparency
- Statewide uniformity and annual updates
- Recognize this is a significant change in existing air district systems that will take resources and time to implement

Overall Emissions Inventory Direction

- Cover criteria pollutant and air toxics emissions from all California stationary sources
- Today's proposal
  - Minimum AB 617 requirements
  - Additional data to support community-level analyses and actions
- Future action: consistent calculation methods and additional sources

Overview of Today's Proposed Action



- Annual emissions reporting for defined stationary sources
- Uniform, statewide reporting
- Collection of relevant facility-level data with options for data verification
- 15-day changes to increase statewide uniformity

Primary Regulation Elements

Applicability

- Who is subject to reporting?

Reporting Requirements

- Consistent reporting deadlines
- Uniform data report contents

Implementation

- CARB and Air District collaboration

Applicability

GHG Emissions	• Subject to GHG reporting
Criteria Pollutants	• Emissions > 250 tons/year
Toxic Air Contaminants	• Elevated prioritization score
Community level data	• Additional criteria and toxics reporting thresholds

Community Level Data Reporting Threshold Concept for 15-day Process

- Criteria pollutants: Greater than 4 tons/year of a criteria pollutant
- Air toxics:
  - Phased emissions-based threshold for aggregated emissions
  - Greater than 0.5 pound/year of Nickel or Cadmium at metal processing facilities
  - Greater than 0.005 pound/year of Chromium (VI)
- Include mechanism to minimize the increased reporting workload on air districts

Emission Reporting Schedule

- Start reporting AB 617 data requirements in 2019 for 2018 data statewide
- Districts with AB 617 communities begin reporting additional threshold data for 2020 in 2021, rest of the state starts in 2022
- Annual facility emissions or activity data to be submitted to air districts no later than May 1
  - Districts transfer emissions data to CARB by August 1

CARB

Emissions Data Report Contents

Annual Emissions

- Criteria pollutant and “Hot Spots” Toxics

Detailed Sources

- Device and process level emissions

Methods and Data

- Estimation methods and factors required

Location Information

- For the facility & on-site emission sources

CARB

Implementation by CARB and Air Districts

Requirements are enforceable by CARB and local air districts

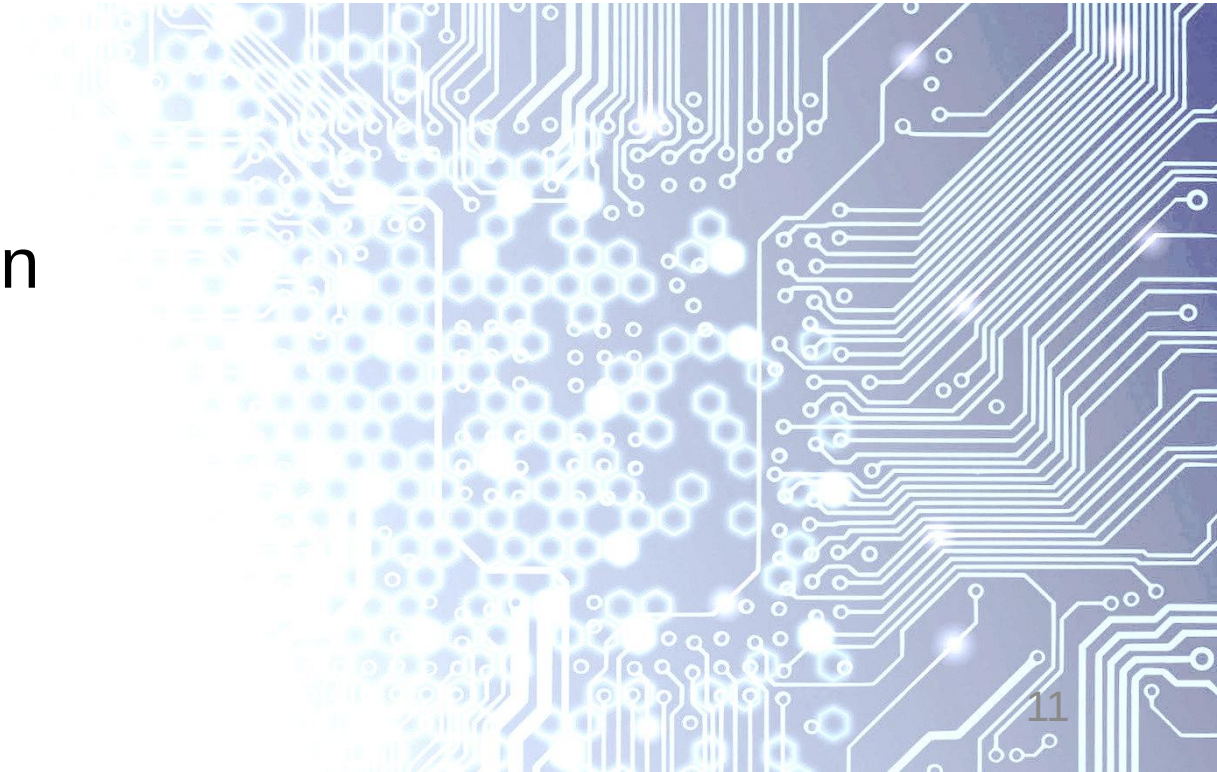
District implementation or enforcement may not result in less stringent requirements than CARB regulation

Any district permit or rule does not alter the terms of the regulation

Implementation or enforcement by districts does not waive or limit CARB's authority

CARB Electronic Data Reporting System

- Starting with 2020 data, facility reports may be submitted to state-administered system
  - Web-based reporting system for submitting reports
  - Use system following district approval
  - Designed to streamline emission reporting structure



Uniform Methods for Calculating Emissions

- Over time, include uniform statewide methods for facility operators
- Methods will be developed in coordination with air districts, CAPCOA, industry and health/community groups
- Utilize a sector-based approach for phasing in requirements

Summary of 15-Day Changes

- Modify applicability to threshold-based annual reporting
- Reporting begins with 2020 data in 2021 for facilities districtwide in districts with a “Year-1” AB 617 community
- Expand threshold-based reporting statewide beginning with 2021 data reported in 2022
- Remove 5-year reporting window

Future Implementation Steps

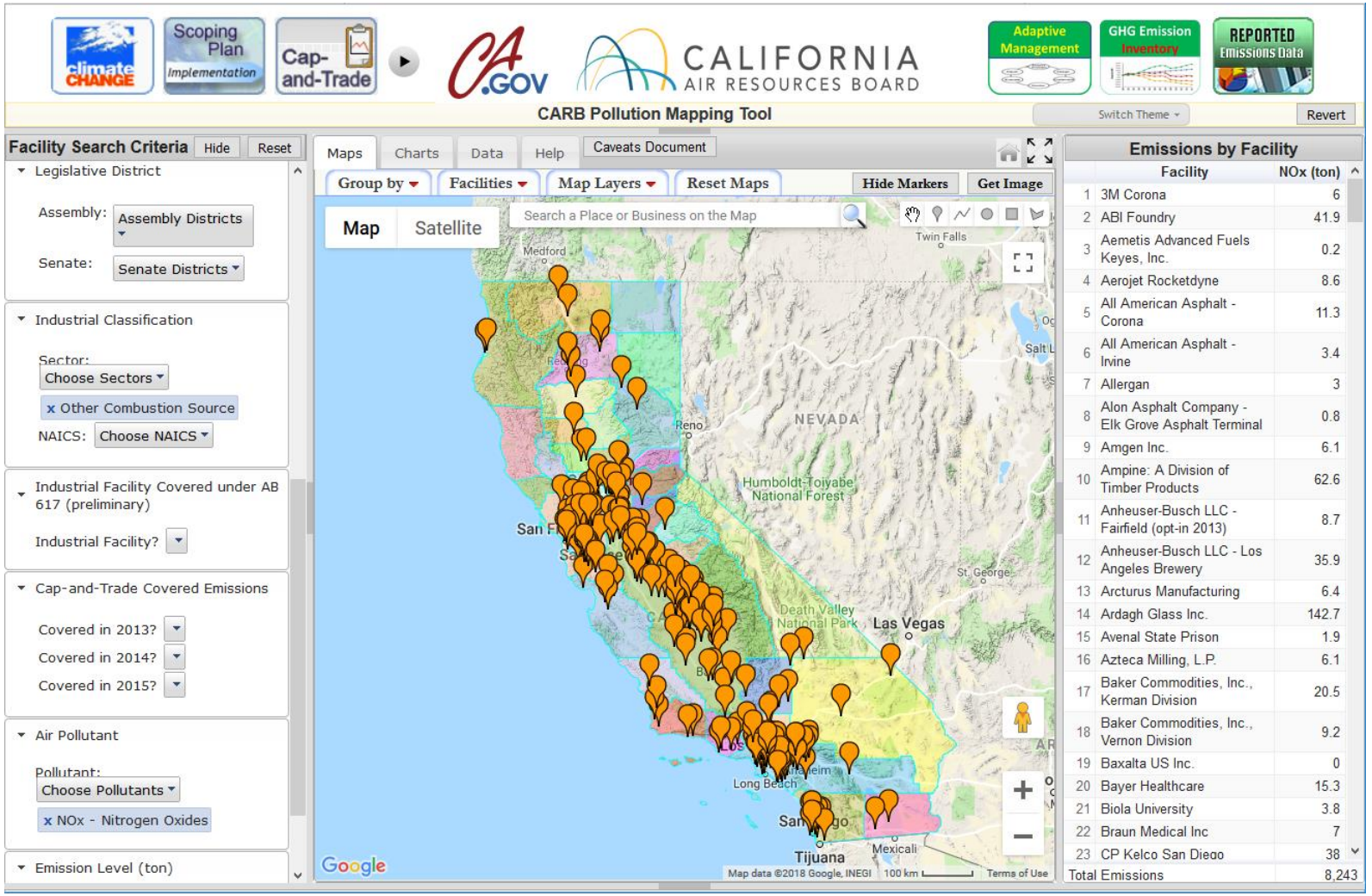
- Work with air districts, industry, and health/community groups on uniform methods and emission factors
- Explore options for funding source to support broader reporting scope
- Identify updates to regulation to collect additional data needed to understand community exposures
  - Updates to 2588 Appendix A-I toxics list
  - Sources identified in community reduction programs

Benefits of Proposed Action

- Comprehensive statewide facility-focused emissions inventory
- Improved public access to emissions data
- Refined analyses to support emissions reductions actions

Better Public Access to Emissions Data

- Improved data coverage for facilities
- Fill in data gaps for smaller facilities in communities
- Statewide uniformity



Pollution Exposure Analysis

Current Analysis

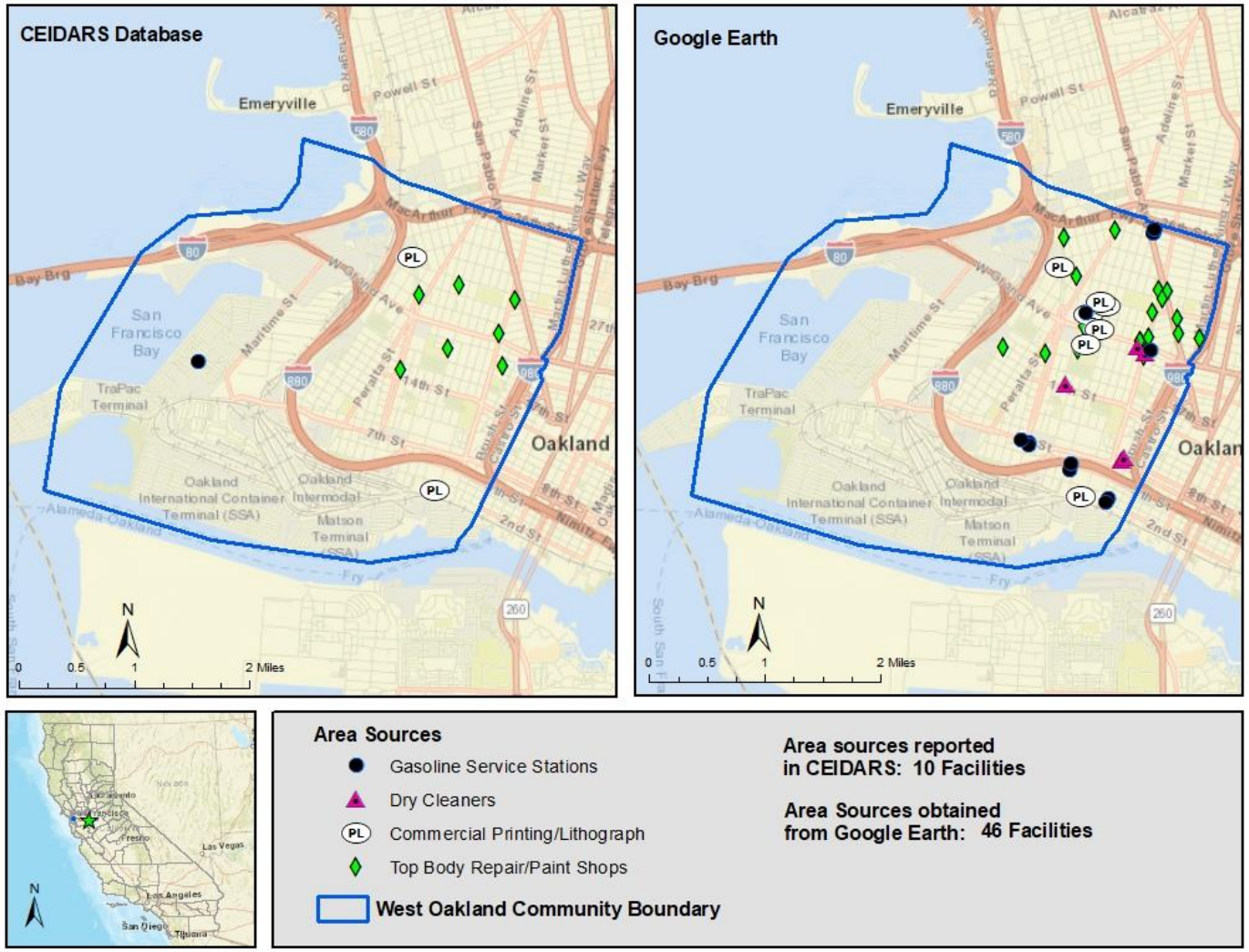
"What are the major toxic pollutants that I'm exposed to? How much of the emissions are driven by mobile vs stationary sources? How much do minor sources contribute in the aggregate to pollution in my county?"

New Analysis

"What are the combined major and smaller toxics emission sources that contribute to community exposures? What actions are most important in terms of reduction of emissions and exposure at the community level?

Pollution Exposure Analysis

Current Analysis
10 facilities



Future Analysis
46 facilities

Support Trend &Technology Analysis

Current Analysis

"What are the broad, general trends we can see from periodic reporting for the larger sources and what are the impacts to regional attainment?"

New Analysis

"What are the annual trends we can track explicitly for a broad universe of sources and specific facilities within a community?"

Merging with Health Data

Current Analysis

"How can we develop a semi-quantitative evaluation of sector-based exposure and health impacts of toxics sources?"

New Analysis

"What are the individual and combined (cumulative) exposure and health impacts we model for toxics, using comprehensive, annual data?"

Assessing Emissions Among Communities

Current Analysis

"What emission reduction strategies are most effective from a statewide (or regional) perspective?"

New Analysis

"What emission reduction strategies are most effective for my unique community, and how are emissions changing in my community compared to others?"

Staff Recommendation

- Approve the proposed Resolution, which includes adoption of the Final Regulation Order
- Direct staff to conduct a comprehensive 15-day process and finalize the Final Statement of Reasons and submit the completed regulatory package to the Office of Administrative Law
- Direct staff to work with air districts to minimize workload and secure needed resources

End